THE BIG DEAL

A Techno-Political Entirely True Thriller



By Oscar Leung

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The Big Deal: A Techno-Political Entirely True Thriller

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Introduction

This is an entirely true story that sounds like a Hollywood movie. It is shocking. These are the facts.

Vladimir Nintin started all this in 1989. Vladimir was an administrative clerk in the Soviet Army. As Russia was abandoning it's attempt to seize Afghanistan, Vladimir was in a small temporary military field office organizing some rolled up charts to go between the "Burn-Box and the "Return to Moscow" box. He made a decision that changed the course of history.

Today, in 2016, his choice has led to many deaths, the failure of a U.S. President, the collapse of a U.S. political party, the rise and fall of a vast field of "Cleantech companies", trillions of dollars in missing taxpayer funds and epic document leaks that have forever altered the way the world views it's governments.

Vladimir had some documents in his hands at that moment. The afternoon sun was driving shafts of amber light through the Perspex windows of the canvas and wood make-shift field office. Vlad was organizing the take away documents for the Russian retreat from Afghanistan. The shafts of light, in Afghanistan are always made solid by the constant dust that is everywhere. That dust left a thin layer of itself on everything.

These particular documents were called: "The Treasure Maps". They were said to show where five trillion dollars worth of copper, lithium, indium and other technology minerals were hidden in the Afghan plains. That lithium and indium could power Elon Musk's cars and Solyndra, Fisker's, Abound's Cleantech (if only a certain group of Silicon Valley billionaires had a way to monopolize that...hmmmm?)

But; were those "Treasure Maps" a trick or a treat?

To this day, controversy exists across the intelligence communities, of many nations, about whether, or not, those maps were a scam created to "trick the American's" or the actual locations of trillions of dollars of mining deals that were "antibody's for the taking". The papers that the CIA geologists pulled out of that archival library in Kabul, Afghanistan still read to be a bit too convenient for what happened next.

Decades later, after an invasion or two, and vast expenditures of cash, political capitol and lives, very little of the promised golden mining treasure has materialized. What has materialized is epic corruption, political payola, campaign secrets, deaths and controversy.

Goldman Sachs, McKinsey Consulting and Deloitte helped a few rogue CIA buddies distribute a huge number of white papers and press releases which used the buzz words: "*Trillions of dollars of lithium in Afghanistan*" and "*Afghanistan is the Saudi Arabia of Lithium*". Why would those particular companies put so much effort into hyping a pile of dirt on the other side of the planet?

The answer lies in who they hyped it to and who took the bait. It turns out, most of the money that flowed through this (probable) scam financed the Obama campaign. It also turns out that those who skimmed profits from this vast flowing river of corruption sludge were Elon Musk, John Doerr, Eric Schmidt, Steve Jurvetson and the very pack of investors who co-funded the Obama campaign. They were also the very same people who, exclusively, got the only cash from the Obama Administration. They are also the very same people who had partnered with the Russian mining companies who were standing by to go back into Afghanistan to dig up this magical dirt-pile. Where "covert mining deals" were never a big election deal, in 2016, thanks to some monumental document leaks, they became one of the biggest deals in U.S. history..and not in a good way.

(Stay tuned for additional chapters from the book: THE BIG DEAL...)

BACKGROUND REFERENCES AND RESEARCH INFO:

PROPUBLICA BUSTS OPEN:

The Afghanistan Mining Scam Failure

G.I. Dough

The U.S. Spent a Half Billion on Mining in Afghanistan With 'Limited Progress'

The Special Inspector General for Afghanistan Reconstruction has labelled yet another project in danger of failing. This time its U.S. plans to develop the country's oil, gas and minerals industries.

by Megan McCloskey



ProPublica,

G.I. Dough

ProPublica is investigating how billions of U.S. tax dollars have been spent on questionable or failed projects and how those responsible for this waste are rarely held accountable.

Latest Stories in this Project

- Pentagon Task Force: We Want Villas and Flat-Screen TVs in Afghanistan
- Plot Thickens: Pentagon Now Facing More Scrutiny Over \$766 Million Task Force
- Watchdog Accuses Pentagon of Evading Questions on \$800 Million Afghanistan Program
- Taxpayers Fund Yet Another Unneeded Building in Afghanistan
- The Military Built Another Multimillion-Dollar Building in Afghanistan That No One Used

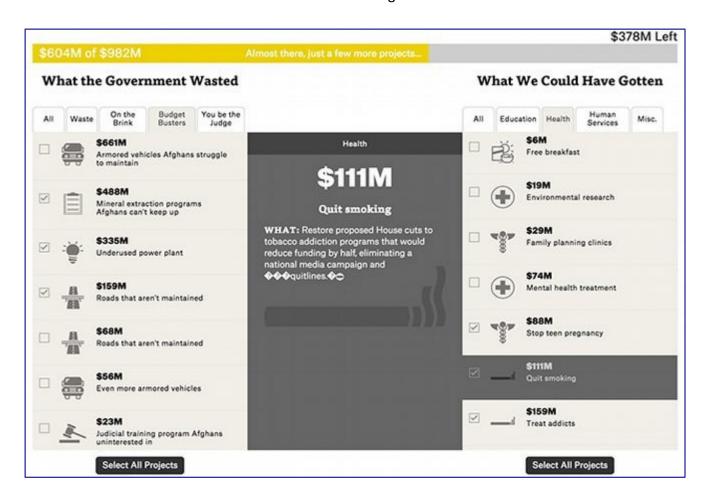


The United States has spent nearly half a billion dollars and five years developing Afghanistan's oil, gas and minerals industries — and has little to show for it, a government watchdog reported today.

The project's failings are the result of poorly planned programs, inadequate infrastructure and a challenging partnership with the Afghan government, the Special Inspector General for Afghanistan Reconstruction <u>wrote</u> in its newest damning assessment of U.S. efforts in the war-torn country. The finding comes after some 200 SIGAR reports have detailed inefficient, unsuccessful or downright wasteful reconstruction projects. A recent ProPublica analysis of the reports found that there has been at least \$17 billion in questionable spending.

We Blew \$17 Billion in Afghanistan. How Would You Have Spent It?

Here's just what the Special Inspector General for Afghanistan Reconstruction found. See for yourself how that money could have been used at home. **Explore the app.**



The United States Agency for International Development and a Pentagon task force were in charge of developing a so-called "extractive" industry in Afghanistan — basically a system for getting precious resources out of the ground and to the commercial market. SIGAR <u>called out both</u> USAID and the Defense Department last year for their failures to coordinate and to ascertain the ability of Afghans to sustain the project, which unsurprisingly is not promising. In fact, when international aid stopped supporting the Afghan office responsible for oversight of the petroleum and natural gas industries, two-thirds of the staff were fired.

Exploiting these resources, which are estimated to be worth as much as \$1 trillion, is pivotal to Afghanistan's economic future. SIGAR noted that the Afghan government has shown progress under USAID's tutelage in regulating and developing the commercial export of the resources. But the report said the project was still hampered by corruption, structural problems and a lack of infrastructure for the mining industry, such as reliable roads. Many of the mines operate illegally, with some profit going to the insurgency, SIGAR said.

When it came to individual extractive projects, there was little progress made, the IG found.

The controversial Pentagon task force in charge of much of the effort, the Task Force for Business Stability Operations, spent \$215 million on 11 extractive programs, but "after operating in Afghanistan for 5 years, TFBSO left with nearly all of its extractive projects incomplete," SIGAR found. Three of

the programs technically met objectives, but one of those is of questionable value at best. The task force built <u>a gas station for an outrageously inflated cost</u> and in the end it didn't have any customers. So while the objective to create the station was achieved, SIGAR doubted it was a worthwhile venture.



The task force, made up of mostly civilian business experts and designed to develop the Afghan economy, has come <u>under fire from SIGAR and Congress</u> for demanding unusual and <u>expensive accommodations</u> in the country, allegedly punishing a whistleblower, and lacking overall accountability. The Senate is holding a hearing on the task force next week.

In today's report, SIGAR highlighted that the task force spent \$46.5 million to try to convince companies to agree to develop the resources, but not one ended up signing a contract. About \$122 million worth of task force programs had mixed results, SIGAR said.

The Defense Department declined SIGAR's request to comment on its findings. In its response, USAID said it has helped Afghanistan "enact investor-friendly extractive legislation, improve the ability to market, negotiate and regulate contracts, and generate geological data to identify areas of interest to attract investors." Any conclusions and criticisms, USAID told SIGAR, "need to be substantially tempered by the reality that mining is a long-term endeavor."



Megan McCloskey

Megan McCloskey covers the military for ProPublica. Previously she was the national correspondent at Stars and Stripes.

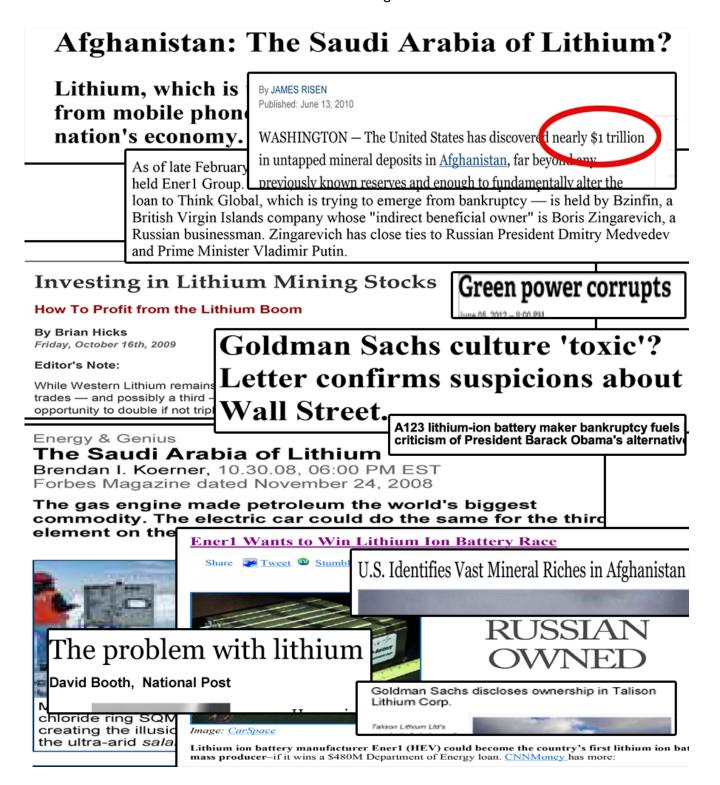
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WHY A WEBSITE COMPANY DESPERATELY WANTS TO PUSH ELECTRIC CARS! GOOGLE'S AWFUL SECRET

Google's owners got an exclusive kickback scam between themselves and the White House over lithium ion batteries ravaged from war profiteering in Afghanistan, political rigging in Bolivia and other war incursions.

Google wants to push electric cars to keep it's owners political payola scams alive.

Deadly, toxic, explosive, a risk to national security, fetus damaging...yet Google charged full speed ahead into it.. READ THE REPORT TO SEE WHY!



Obama administration to announce efforts to boost selfdriving cars By David Shepardson Reuters



By David Shepardson

DETROIT (Reuters) - The Obama administration will announce efforts to boost self-driving cars on Thursday, and President Barack Obama may discuss advanced transportation efforts in his final State of the Union Address on Tuesday, according to government officials.

Mark Rosekind, head of the National Highway Traffic Safety Administration, told reporters that Transportation Secretary Anthony Foxx will be in Detroit to talk about efforts by the Obama administration to speed the introduction of self-driving vehicles.

"Thursday is huge because this is the White House telling you that the secretary is going to be here to amplify stuff that is coming out of the State of the Union, and it's focused on self-driving cars," Rosekind told reporters in Detroit.

There is not yet a clear legal framework governing their presence on U.S. roads.

Automakers and technology companies such as Alphabet Inc's Google have called on regulators to clarify guidelines for introduction of autonomous driving technology, in part out of concern that a mishap involving a self-driving car could result in costly litigation.

A Google spokesman said the company will take part in Thursday's announcement by Foxx. Detroit automakers are also likely to participate.

In December, Rosekind said he opposes a "patchwork" of state regulations on driverless cars and promised a "nimble, flexible" approach to writing new rules for self-driving vehicles.

(Reporting by David Shepardson; Editing by Bill Rigby and Dan Grebler)

Google Seeks Multiple Auto Partners for Self-Driving Car Unit

<u>Dana Hull danahull</u> <u>John Lippert johnmlippert</u>

- Company wants to begin announcing some joint efforts this year
- Google vehicle chief John Krafcik speaks at Detroit meeting

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Google hopes to form partnerships with many automakers and suppliers as it develops self-driving cars to reduce traffic accidents and expand mobility for elderly and disabled people, the head of its vehicle project said.

The Alphabet Inc. company wants to announce some of those joint efforts during 2016, John Krafcik, the Google executive, said in Detroit at an Automotive News conference Tuesday held in conjunction with North American International Auto Show.

Almost every automaker "has been in to speak with us, if only to understand where we are," Krafcik said. "I don't know how many we'll end up having."

His comments counter speculation that Google would pick a single automaker as its exclusive partner for self-driving cars. Yahoo Autos reported last month that Ford Motor Co. would announce a <u>joint</u> <u>venture with Google</u> on self-driving. Fiat Chrysler Automobiles NV and General Motors Co. have also said they're talking with Google about developing self-driving cars.

Google Hires Former Obama Adviser Atkinson to Lead Global Policy

<u>Jack Clark mappingbabel</u> <u>Share on FacebookShare on Twitter</u>

- Caroline Atkinson was deputy national security adviser
- Company faces probes in Europe and U.S. as influence grows

Google has hired former White House Deputy National Security Adviser Caroline Atkinson to lead its global policy team as the Internet advertising giant seeks an advocate to deal with regulators around the world.

Atkinson, 63, stepped down in December from her post in U.S. President Barack Obama's administration as an <u>emissary</u> to the Group of 20 economies, negotiating behind-the-scenes on agreements of international scope and significance. Google, a unit of Alphabet Inc., currently faces <u>probes</u> from both federal and European regulators into its businesses, as the company's increasing influence over areas like mobile phones and Web search draws scrutiny.

"Caroline's an internationally respected diplomat and adviser, and we're delighted to have such a thoughtful leader heading our global policy team," Google General Counsel Kent Walker said in a statement.

Atkinson also <u>previously</u> worked at the National Security Council, the International Monetary Fund, the Treasury Department, and investor consultancy Stonebridge International. She was <u>selected</u> by the Obama administration in June 2013.

Articles

Afghanistan Waste Exhibit A: Kajaki Dam, More Than \$300M Spent and Still Not Done

Today, 12:30 p.m.

A Senate subcommittee is looking at waste by a Pentagon task force. It would do well to review the reasons why a major hydroelectric power plant sits unfinished.

The U.S. Spent a Half Billion on Mining in Afghanistan With 'Limited Progress'

Jan. 14, 12:49 p.m.

The Special Inspector General for Afghanistan Reconstruction has labelled yet another project in danger of failing. This time its U.S. plans to develop the country's oil, gas and minerals industries.

We Blew \$17 Billion in Afghanistan. How Would You Have Spent It?

Dec. 17, 2015, 11:03 a.m.

The U.S. government has wasted billions of dollars in Afghanistan, and until now, no one has added it all up. Project after project blundered ahead. And Congress has barely blinked as the financial toll has mounted. Here's what the Special Inspector General for Afghanistan Reconstruction found.

Pentagon Task Force: We Want Villas and Flat-Screen TVs in Afghanistan

Dec. 3, 2015, 12:01 a.m.

In its latest salvo, the inspector general dings the controversial task force for spending \$150 million on private housing in Afghanistan, including fancy meals and round-the-clock bodyguards.

<u>Plot Thickens: Pentagon Now Facing More Scrutiny Over \$766 Million Task</u> <u>Force</u>

Nov. 25, 2015, 12:45 p.m.

Senators were already questioning why the Defense Department was restricting a government watchdog. Now there are criminal investigations and questions about retaliation against a whistleblower.

<u>Watchdog Accuses Pentagon of Evading Questions on \$800 Million</u> <u>Afghanistan Program</u>

Nov. 2, 2015, 8:35 a.m.

Despite lacking access to key documents and personnel, the inspector general determined that nearly \$43 million had been spent on a natural gas station that should have cost closer to \$300,000.

Taxpayers Fund Yet Another Unneeded Building in Afghanistan

Sep. 3, 2015, 7 a.m.

The U.S. military shelled out millions before deciding the project was unnecessary, bringing the total for unused buildings spotted by the Inspector General for Afghanistan to nearly \$42 million.

<u>The Military Built Another Multimillion-Dollar Building in Afghanistan That No One Used</u>

July 19, 2015, 11:01 p.m.

In its latest report, the inspector general found that the U.S. military continued to build a \$14.7 million warehouse after it knew it wasn't needed, echoing an earlier investigation into an unused \$25 million HQ.

Behavior of Military Lawyer in Boondoggle HQ Inquiry Under Scrutiny

May 28, 2015, 11:13 a.m.

Several U.S. Senators and military lawyers say they are concerned by Col. Norm Allen's attempts to thwart an investigation into why the U.S. Military built an unneeded luxury headquarters in Afghanistan.

Boondoggle HQ

May 19, 2015, 11:01 p.m.

The \$25 Million Building in Afghanistan Nobody Needed

Money as a Weapons System

May 15, 2015, 8 a.m.

How U.S. commanders spent \$2 billion of petty cash in Afghanistan

<u>Billions Blown in Afghanistan Reconstruction Spending? (MuckReads Edition)</u>

March 31, 2015, 2 p.m.

Pentagon Finally Identifies the Remains of a POW Lost Since 1942

Jan. 27, 2015, 5 a.m.

Long buried alongside hundreds of unknown U.S. soldiers in the Philippines, Pvt. Arthur "Bud" Kelder is on his way home after a lawsuit by his family and an investigation by ProPublica and NPR.

Head of Flawed Effort to ID Missing Soldiers Loses Job

Oct. 3, 2014, 9:32 a.m.

The departure of veteran lab director Tom Holland appears to be the first leadership change in the Pentagon's overhaul of its identification process.

Pentagon Report Finds Litany of Problems with Effort to Recover MIAs

July 11, 2014, 11:17 a.m.

A draft inspector general report found that the mission lacks basic metrics for how to do the job – and when to end it.

Pentagon Finally Decides to Dig Up Remains of Long Lost Soldier

July 1, 2014, 11:25 a.m.

After a ProPublica story, the military will exhume a grave in the Philippines that may hold the remains of Bud Kelder, an American POW whose family has long been fighting the Pentagon to get him home.

Big Revamp of Pentagon's Troubled Mission to Find Missing Soldiers Looks a Lot Like Old Revamp

April 16, 2014, 12:31 p.m.

Without change of leadership throughout, meaningful change could be elusive, critics say.

Pentagon Overhauls Effort to Identify its Missing

March 31, 2014, 6:20 p.m.

The restructuring promises to address many of the problems laid out in a recent ProPublica and NPR

investigation.

French, Germans Return Fallen GI After Pentagon Gives Up

March 21, 2014, 4:44 a.m.

For more than 50 years, Army PFC Lawrence S. Gordon was mistakenly interred as a German soldier in a cemetery in France. Then European officials did what the U.S. military would not, exhuming him and identifying him with DNA.

Four Ways to Really Fix the Pentagon's Effort to ID the Missing

March 14, 2014, 10:11 a.m.

Changes must go beyond bureaucracy to update the scientific approach and embrace outside help.

Mining in Afghanistan - Wikipedia, the free encyclopedia

Mining in Afghanistan is controlled by the Ministry of Mines and Petroleum, which is headquartered in Kabul with regional offices in other parts of the country.

wen.wikipedia.org/wiki/Mining in Afghanistan

The future of Silicon Valley may lie in the mountains of ...

The future of Silicon Valley's technological prowess may well lie in the war-scarred mountains and salt flats of Western Afghanistan.

venturebeat.com/2014/03/20/lithium-afghanistan/

\$1 Trillion Motherlode of Lithium and Gold Discovered in ...

A recently unearthed 2007 United States Geological Service survey appears to have discovered nearly \$1 trillion in mineral deposits in Afghanistan, far bey

mining.com/1-trillion-motherlode-of-lithium-and-gold...

Afghanistan: The Saudi Arabia of Lithium?: Discovery News ...

Lithium, which is used to make batteries for everything from mobile phones to iPads, could transform the war-torn nation's economy. THE GIST - Nearly \$1 ...

news.discovery.com/earth/afghanistan-minerals-lithium.htm

Afghanistan the "Saudi Arabia of lithium" - Khaama Press (KP ...

The Afghanistan's natural resources are considered to be a silver lining for the economy of Afghanistan, as the NATO-led international coalition

■khaama.com/afghanistan-the-saudi-arabia-of-lithium-1747

Afghans Wary as Efforts Pick Up to Tap Mineral Riches - The ...

With a trillion-dollar cache of oil, gold and other resources underground, hopes of self-sufficiency in Afghanistan are tempered by worries about ...

nytimes.com/2012/09/09/world/asia/afghans-wary-as-eff...

The War is Worth Waging": Afghanistan's Vast Reserves of ...

"The War is Worth Waging": Afghanistan's Vast Reserves of Minerals and Natural Gas The War on Afghanistan is a Profit driven "Resource War".

globalresearch.ca/the-war-is-worth-waging-afghanistan-s-vas...

Why Afghanistan's Lithium Is a Big Deal, Even If It Never ...

Why is this significant? Because even if Afghanistan's **lithium** never leaves the ground, the sudden, black-swan appearance of a new and potentially massive ...

popsci.com/science/article/2010-06/why-finding-lithi...

U.S. Identifies Vast Mineral Riches in Afghanistan - The New ...

The nearly \$1 trillion in untapped deposits are enough to fundamentally alter the **Afghan** economy and perhaps the **Afghan** war itself, officials said.

<u>nytimes.com/2010/06/14/world/asia/14minerals.html</u>

The Spoils of the War on Afghanistan, One Trillion Dollars of ...

Above: An Italian helicopter flies over western Afghanistan during an international operation. **Lithium** reserves have been found in the western part of that country.

globalresearch.ca/the-spoils-of-the-war-on-afghanistan-one-...

Conspiracy Theory- Afghanistan's Lithium Takeover

Conspiracy Theory- Afghanistan's **Lithium** Takeover. ... The candidate must support the corporation's wishes, and this time it would be the Afghanistan **mining** ...

 ${\color{red} \underline{ {\color{blue} {\color{blue} \underline{ }}} illuminatiwa tcher.com/conspiracy-theory-afghanistans-lithium-ta...}}$

<u>Does Us Have Control Of Lithium Mines In Afghanistan - Prijom</u>

The War is Worth Waging Afghanistan's Vast Reserves of Minerals : The 2001 bombing and invasion of Afghanistan has been presented to World public for **lithium** ...

prijom.com/posts/does-us-have-control-of-lithium-min...

There are better places than Afghanistan to mine for lithium.

For years, the **mining** industry has known that there are vast supplies of **lithium**, an element that is crucial to the technology business, sitting untapped u

slate.com/articles/news and politics/politics/2010/...

Eyes on Afghanistan as Next Lithium Motherlode | OilPrice.com

Eyes on Afghanistan as Next **Lithium** Motherlode. ... **Lithium** is positioned to play a key role in this **mining** venue, as Afghanistan is said to have one of the world's ...

<u>oilprice.com/Energy/Energy-General/Eyes-on-Afghanistan...</u>

China, Not U.S., Likely to Benefit from Afghanistan's Mineral ...

Although the U.S. government has spent more than \$940 billion on the conflict in Afghanistan since 2001, a treasure trove of mineral deposits, including ...

<u>dailyfinance.com/2010/06/14/china-us-afghanistan-mineral-m...</u>

Afghanistan grants key copper and gold permits | MINING.com

The government of Afghanistan announced Friday its preferred bidders for three of its four current mineral tenders, with a consortium backed by City of London banker ...

mining.com/afghanistan-grants-key-copper-and-gold-mi...

Afghanistan's lithium Eureka: A big win for China, or another ...

Since reports emerged this weekend that Afghanistan is home to a massive deposit of useful minerals, namely **lithium**, the green news complex has been ...

<u>□venturebeat.com/2010/06/14/afghanistans-lithium-eureka-a-...</u>

Dreams Of A Mining Future On Hold In Afghanistan: NPR

Afghan miners in a makeshift emerald mine in the Panjshir Valley in 2010. Reports suggest that Afghanistan is sitting on significant deposits of oil, gas ...

<u>npr.org/2012/04/04/149611352/dreams-of-a-mining-f...</u>

Massive Afghanistan Lithium Deposit (As In Batteries) Could ...

A large mineral deposit worth an estimated \$1 trillion has been discovered in Afghanistan, Pentagon officials revealed today. The find could change the nation's ...

©gizmodo.com/5562473/massive-afghanistan-lithium-depos...

US discovers natural desposits of gold, iron, copper and ...

A Pentagon memo claims Afghanistan could become the 'Saudi Arabia of **lithium'**, a key raw material in the manufacture of batteries for laptops and mobile phones.

<u>dailymail.co.uk/news/article-1286464/US-discovers-natural...</u>

Afghanistan's Lithium, Pakistan's Loss - New America Media

Anonymous Posted Oct 2 2010. The electric car projects are just a scam to get a ceratin group of VC's to control the **lithium** fields in Afghanistan!

newamericamedia.org/2010/07/afghanistans-lithium-pakistans-lo...

Lack of regulation limits Afghan gem mining | Global Risk ...

The lack of clear industry rules is hampering the growth of Afghanistan's **mining** sector. Blessed with mineral wealth, Kabul remains unable to utilize it.

globalriskinsights.com/2013/06/lack-of-regulation-limits-afghan-...

Afghanistan: War for Lithium? (Mar 11, 2013) - Truth in Media

Afghanistan: War for **Lithium**? How supposed "War on Terror" and "War on Opium" morphed into "War for **Lithium**," mineral essential for building of nuclear weapons; US ...

truthinmedia.org/2013/AfghanWar.html

Vast \$Trillion Mineral Deposits Discovered in Afghanistan ...

'Trillion dollar' mineral deposits have been discovered in Afghanistan according to US officials. These deposits include vast quantities of iron, copper, and **lithium** ...

thenewslink.com/afghanistan-lithium-trillion-dollar-miner...

Lithium in Afghanistan for electric cars: a blessing and a curse

Lithium in Afghanistan, as well as rich deposits of other precious minerals, could further complicate U.S. goals in the Afghanistan war.

personalmoneystore.com/moneyblog/lithium-afghanistan/

Afghanistan's Lithium Wealth Could Remain Elusive

Afghanistan may be the Saudi Arabia of lithium—a key energy storage medium—but prosperity will not flow easily.

news.nationalgeographic.com/news/2010/06/100616-energy-afghanistan-li...

Lithium in Afghanistan - mom.gov.af

Lithium in Afghanistan Figure 1. **Lithium** occurrences in Afghanistan on a low-resolution Landsat image, with major tectonic features, intrusive

mom.gov.af/Content/files/MoMP_LITHIUM_Midas_Jan_2014...

Afghanistan: Mining, Minerals and Fuel Resources

Afghanistan, with a total population of 30,419,928 as of July 2012, is located in Southern Asia, north and west of Pakistan, east of Iran. The country mostly has an ...

<u>azomining.com/Article.aspx?ArticleID=170</u>

Afghanistan copper, lithium worth \$1 trillion | Marketplace.org

American geologists have reported that Afghanistan is sitting on \$1 trillion of copper and **lithium** deposits, a new-found mineral wealth that marks the country as a ...

<u>marketplace.org/topics/world/afghanistan-copper-lithium-w...</u>

Why Lithium Can't Save Afghanistan: Discovery News

Why **Lithium** Can't Save Afghanistan. Jun 16, ... After that comes **mining lithium**-bearing minerals right out of granites. Until recently, ...

<u>□news.discovery.com/earth/can-lithium-really-save-afghanistan...</u>

The ASIA Miner - AFGHANISTAN - Survey of lithium deposits

Central Asian **Mining** Services (CAMS) has been contracted to assist in a survey of **lithium** deposits in Afghanistan. The country is believed to contain significant ...

<u>asiaminer.com/news/latest-news/5996-afghanistan-survey-...</u>

Afghanistan's trillion dollar curse: lithium - City of Brass

Afghanistan has a national **mining** law, ... about Afghanistan's trillion dollar curse: ... work and your post about Afghanistan's trillion dollar curse: **lithium**

<u>beliefnet.com/columnists/cityofbrass/2010/06/afghanista...</u>

lithium mining in pakistan - mtmcrusher.com

Why Afghanistan's **Lithium** Is a Big Deal, Even If It Never Leaves the Lack of Regulation Limits **Afghan** Gem **Mining** | Global Risk Insights.

mtmcrusher.com/environment/lithium-mining-in-pakistan.html



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The future of Silicon Valley may lie in the mountains of Afghanistan

Richard Byrne Reilly

Tags: Andrew Chung, Apple, Donald R. Sadoway, editor's pick, Jay Jacobs, Khosla Ventures, lithium, Lithium Exploration Group, lithium-ion batteries, Michel Chossudovsky, Tesla, Tesla Motors, topstories



Above: An Italian helicopter flies over western Afghanistan during an international operation. Lithium reserves have been found in the western part of that country.

Image Credit: ISAF Media

The future of Silicon Valley's technological prowess may well lie in the war-scarred mountains and salt flats of Western Afghanistan.

United States Geological Survey teams discovered one of the world's largest untapped reserves of lithium there six years ago. The USGS was scouting the volatile country at the behest of the U.S. Department of Defense's Task Force for Business and Stability Operations. Lithium is a soft metal used to make the lithium-ion and lithium-polymer batteries essential for powering desktop computers, laptops, smartphones, and tablets. And increasingly, electric cars like Tesla's.

The vast discovery could very well propel Afghanistan — a war-ravaged land with a population of 31 million largely uneducated Pashtuns and Tajiks, and whose primary exports today are opium, hashish, and marijuana — into becoming the world's next "Saudi Arabia of lithium," according to an internal Pentagon memo cited by the *New York Times*.

The <u>USGS survey report on Afghanistan</u> that detailed the findings also noted that, in addition to lithium, the country also contains huge deposits of iron ore, gold, cobalt, copper, and potash, among many other valuable minerals.

"The mineral wealth there is astonishing," said professor Michel Chossudovsky of the Montreal-based Center for Research and Globalization, who has written extensively on Afghanistan.

A conservative estimate of the riches is \$1 trillion. In some circles, it's as high as \$5 trillion.



Above: A typical lithium "button" cell found in many small electronics.

Image Credit: Rodrigo Senna

In Silicon Valley and beyond, tech companies like Apple, Google, Amazon, Microsoft, Hewlett-Packard, Samsung, Sony, and Tesla rely on continual, and uninterrupted, access to lithium, as lithium-based batteries are the primary power storage devices in their mobile hardware.

Without these batteries, MacBooks, iPads, iPhones, Kindles, Nooks, Galaxy IIIs, Chromebooks, and, yes, Tesla Model S cars would be largely worthless. If forced to use older, nonlithium batteries, their battery lives would certainly be much shorter.

The world's current lithium heavyweight is Bolivia, the biggest exporter of the element. There, in the swamps and marshlands of the southern region of the country near where the borders of Chile and Argentina meet, are the biggest deposits.

Canada, China, Australia, and Serbia also have varying amounts of lithium, but not as much as Bolivia. Or apparently, Afghanistan.

Enough to last a lifetime

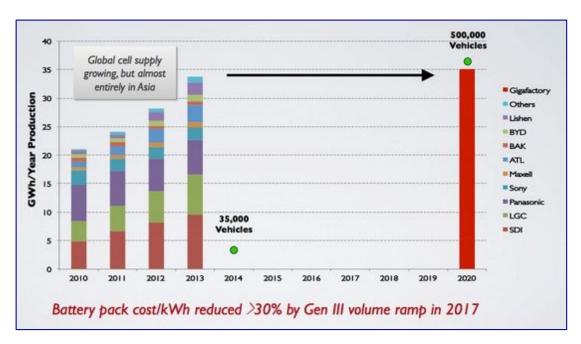
Depending on who you talk to, the current lithium global reserves are adequate for at least another generation of lithium-ion battery manufacturers to produce them.

But not everybody thinks so, and some say the light metal compound may someday run dry. That could in turn spell trouble for any company whose business depends on light and portable mobile electronics — unless someone comes up with an alternative to lithium batteries before then.

The experts VentureBeat interviewed pointed to sharp year-on-year increases in the demand for lithium. That's putting heavy pressure on existing stockpiles.

According to Lithium Americas, a Canadian lithium-mining company with significant business interests in Argentina, <u>lithium demand will more than double in the next 10 years</u>, while lithium prices have nearly quadrupled during the same timeframe.

Tesla, for its part, is in the process of investing up to \$5 billion to build its own lithium-ion <u>Gigafactory</u> in Texas, a plant capable of churning out 500,000 expensive battery packs a year by 2020 for its line of zero-emission, all-electric cars.



Above: Tesla predicts that its "Gigafactory" will produce more lithium batteries (by capacity) in 2020 than the entire global production of such batteries in 2013.

Image Credit: Tesla Motors

A Tesla spokeswoman did not return calls seeking comment.

As a potential source to feed that demand, enter Afghanistan.

"At some point, if present trends continue, demand [for lithium] will outstrip the supply. And again, at some point, the market for lithium-ion could get so big that it actually affects the supply chain," said Donald R. Sadoway, a professor of the Materials Chemistry Department of Materials Science and Engineering at MIT.

Looking at Afghanistan, Sadoway says the war-ravaged nation, which has no effective mining infrastructure in place, may well be attractive to the world's mining outfits.

"In this regard," Sadoway, one of the world's foremost experts on energy sources, says, "the deposits in Afghanistan could be important."

Andrew Chung, a venture capitalist with <u>Khosla Ventures</u> in Silicon Valley who has invested in multiple startups producing alternative batteries, says lithium-ion batteries are limited in their lifetime cycles, scalability, and cost. Despite this, Chung says, he can understand how the untapped reserves of Afghan lithium are now an increasing focus.

"It is an issue of the supply chain, whether it's Afghanistan or other [countries]. There is a finite supply, and lithium-ion will continue to be the [power] choice for the next decade," Chung said.

Some of the Valley's biggest and most powerful tech companies either declined to comment for this story or never returned calls. But they didn't deny the importance of lithium-ion batteries.

For instance, an Apple spokesperson declined to comment for this story but provided VentureBeat with

a 2014 "Suppliers List" of the 200-plus vendors it uses to produce its products. A related post made the Cupertino, Calif.-based company's commitment to lithium batteries clear, at least in the short term.

"Rechargeable, lithium-based technology currently provides the best performance for your Apple notebook computer, iPod, iPhone, or iPad," the Apple post says.

<u>Sony Energy Devices Corp.</u> invented the lithium-ion battery in 1994. It was hailed as a breakthrough, providing longer battery life and without the "memory effect" that gradually reduced the effective capacity of previous types of batteries.

Since then, companies have gradually refined lithium battery technology but have not succeeded in moving beyond it. Indeed, early Tesla cars are actually <u>powered by large packs of industry-standard lithium-ion battery cells</u> — the same type of cells found in many laptop batteries.

And here is where it gets interesting.

Sharply increasing demand



Above: The custom battery pack Tesla uses for its Tesla Model S. Inside are hundreds of lithium cells.

Image Credit: Tesla Motors

If electric car manufacturers begin ramping up production of lithium-ion battery-powered cars, the global demand for lithium will skyrocket. This could potentially come about at the same time for increasing demand for handheld consumer goods like tablets and laptops, Chung said, thus creating a perfect storm.

"So you want to start looking at other sources producing it with current supplies being called into question, if we move more toward production of electric cars," Chung said.

Which is why, increasingly, eyes are turning to Afghanistan and its new purported lithium reserves, a country long referred to as the "graveyard of empires." The U.S. invaded Afghanistan after the terror attacks of Sept. 11, 2001, and according to iCasualties, 2,315 American servicemen and women have been killed there.

Analyst Jay Jacobs of <u>Global X Funds</u> in New York, which has interests in lithium mining, said demand for the compound is growing, and that "there are two regions that have been revealed to contain huge

lithium reserves: Afghanistan and Bolivia."

William Tahil, a respected lithium expert who lives in France and is the general director for Material International Research, argues that lithium deposits in Bolivia will at some point be depleted.

Jacobs was sanguine about safely extracting lithium from Afghanistan. He said political risks there were considerable.

"With that being said, should there be a substantial and sustained increase in demand for lithium, lithium miners may become increasingly interested in the country as it has an abundance of the resource," Jacobs said.

It was the Soviets who first discovered the country's deposits when they invaded in 1979. Soviet geologists began mapping Afghanistan's lithium, gold, and potash fields but abandoned their efforts after the former communist superpower pulled out of the country in 1989.

But with a weak and corruption-plagued "central government," Afghanistan is now ripe for the picking, Chossudovsky said. Indeed, the country is still very much divided into fiefdoms, with the Muslim fundamentalist Taliban, warlords, and drug traffickers controlling large swaths of the country — and using violence to advance their interests.

"There's no question the mining companies will go in there. No question. There's no real functioning government there to reap the foreign investment of the mineral deposits. This makes it all the more enticing to the mining companies because nobody in the government of [President] Hamid Karzai will be regulating the bonanza of lithium, so they can do what they want," he said.

Jockeying for position



16-11700-smb Doc 641-5 Filed 12/17/16 Entered 12/23/16 10:36:11 Exhibit Attachment 5 Pg 27 of 52

Above: A lithium processing plant in Chile. Lithium is typically refined from vast piles of mineral salts.

Image Credit: Reduse.org

For its part, the U.S. government, which helped locate the lithium deposits using flyovers with a sensor-filled Lockheed P-3 Orion and teams of geologists fielding soil samples, knows a potential gold rush when it sees one. And it has no intention of being left on the sidelines. Especially since the Chinese are now — and quickly — making deals with Afghan pols for mineral rights to copper deposits.

The USGS did return multiple calls seeking comment. Nor did the Pentagon.

Despite what some say are the shortcomings of lithium-ion batteries, venture capitalists and investors continue pouring money into them. Amprius, a lithium battery maker based in Sunnyvale, Calif., snared a \$30 million infusion round of investor cash in January.

Over at the Afghan embassy in Washington, D.C., the Afghans are licking their lips at the potential lithium and mineral windfall despite the country's continued conflict with a resurgent Taliban. What this may portend for the impoverished and war-torn nation is anybody's guess. But the Afghans are playing up the finds — or they were, until recently.

"In recent years, headlines from the Afghan mineral sector have competed to outdo each other in scale: from the landmark \$3 billion Chinese investment in the Aynak copper concession to the astounding survey work of the U.S., Afghan, and British Geological Services estimating anywhere between \$1 trillion and \$3 trillion in mineral potential, to the historic \$11 billion deal now being finalized with an Indian consortium for the Hajigak iron ore concession," said a posting on the <u>Afghani Washington DC</u> website.

Afghanistan's ambassador to the U.S., Eklil Hakimi, presided over a press conference at the Afghan embassy in Washington, D.C., on March 10, where he talked about the untapped deposits, along with reps from the USGS and other U.S. politicians.

But Hakimi, through a spokesman, told me he simply didn't have the time to talk.

More information:

- <u>Apple</u>
- Tesla Motors
- <u>Lithium Exploration Group</u>
- Khosla Ventures

by VBProfiles



"Afghani-Scam" Blood For Batteries: Feature Story



Discovery News > Earth News > Afghanistan: The Saudi Arabia of Lithium?

Afghanistan: The Saudi Arabia of Lithium?

Lithium, which is used to make batteries for everything from mobile phones to iPads, could transform the war-torn nation's economy.

Mon Jun 14, 2010 12:25 PM ET Content provided by Waheedullah Massoud, AFP 3 Comments | Leave a Comment

THE GIST

- · Nearly \$1 trillion of mineral wealth has been discovered in war-ravaged Afghanistan.
- · Lithium, gold, iron and copper are among the minerals identified.
- Little has been exploited because the country has been mired in conflict for three decades.



enlarge

Aside from massive lithium stores, iron and copper deposits are also large enough to make Afghanistan one of the world's top producers. Click to enlarge this image.

AP Photo

NATIONAL POST

Friday, May 1, 2009

The problem with lithium

David Booth, National Post





Pierre Verdy, AFP, Getty Images

How quickly we have forgotten. Yesterday's front-page headline is today's page 13 filler, consigned to the back of the newspaper as something sexier or more pressing forces its way to page oneabove the fold.

The subject I'm talking about is oil, the pressing story before all the world's stock markets decided to simultaneously implode. We used to worry about the price of oil and when it would run out, and even

non-petrochemical engineers understood the concept of "peak oil." But, whether alternative energy is still big news or not, this much is clear: The world's oil supply is finite, fossil-fuelled vehicles pollute and the public outcry for an alternative is strong.

The leading alternative right now -- if you judge technology by the amount of press generated -- is electric cars. Electric cars don't pollute, electrons are relatively cheap and, perhaps most importantly, these vehicles seem to have captured the imagination of the American consumer, still the greatest economic engine in the world.

Naturally, there are issues. Electric cars don't have the range that current gasoline-powered cars enjoy. Replenishing the onboard energy supply is problematic, taking anywhere from 30 minutes (with special equipment) to all day. There's also the small problem of the battery having to power both the car's engine and its various ancillary and convenience devices -- someday soon you may have to decide what's more important, air conditioning or getting to your final destination.

Then there's the least talked about problem on our road to electric transportation -- the source of all that power. I don't mean the massive amounts of additional electricity needed to power the approximately seven million cars a very optimistic Carlos Ghosn, Nissan's CEO, estimates will be sold annually by the year 2020 but the actual batteries that will store all those portable electrons. Just as we already have a problem with peak oil having caused last year's massive price spike at the pumps, there may be a similar paucity in the world's capacity to produce lithium, the miracle metal key to so many automakers' future plans for hybrid and electric vehicles.

This lightest metal in the periodic table was used primarily in the production of ceramics and hightemperature glass, not to mention anti-psychotic drugs. But, about two decades ago, it started gaining prominence as a material used for battery production, thanks to the relatively high energy density and

ADVERTISEMENT

A123 lithium-ion battery maker bankruptcy fuels Republican criticism of President Barack Obama's alternative-energy policy





Doing God's Work

How Goldman Sachs Rigs the Game

March 2011



"The first thing you need to know about Goldman Sachs is that it's everywhere. The world's most powerful investment bank is a great vampire squid wrapped around the face of humanity, relentlessly jamming its blood funnel into anything that smells like money."

Matt Taibbi, Rolling Stone Magazine, July 2009

Introduction

Much has been written about Goldman Sachs' immense size and power in the US, of the incessant revolving door between the bank, regulatory and political elites in Washington. But Goldman Sachs has cultivated political contacts around the world, not just in the US capital.

This report looks at how the bank's tentacles have spread throughout British and European political circles, including the regulatory centre of Brussels. Goldman Sachs often operates behind the scenes, also working through a number of business lobby groups. This report explores and exposes those links.

Critics say having friends in high places gives the firm a vital edge. This has also allowed Goldman and other global banks to escape the necessary regulatory reform that many independent commentators believe is vital, especially in areas of derivatives.

There is no doubting that Goldman's image has taken a battering. In the midst of the world's worst oil spill in the Gulf of Mexico, Reuters ran an article entitled: "BP: Still not as evil as Goldman Sachs".²

The bank's plummeting reputation is a result of a series of events: the role it played in causing the financial crisis, and its "arrogant and unapologetic attitude" in its wake, when CEO Lloyd Blankfein described the bank's activities as "God's work". It was also accused by US authorities of defrauding investors out of \$1billion, 4 faced fines of £17.5 million for failing to tell UK regulators that it was under investigation for fraud, 5 and was sued by three ex-employees for sexual discrimination. 6

Under fire, Goldman Sachs responded with the biggest advertising campaign in its history, "to help the wider public understand what we do for our clients."

Yet, as banking commentator, Bethany Mclean, notes: "No outsider can tell how the firm really makes its money. It is a fear that Goldman has the game rigged, even if no one can ever prove how. Not just because of its political connections, but also because of its immense size and power." Recent efforts at transparency – its disclosure of revenue from trading and investing? - do little to allay fears. "They stopped short of doing something really big", said one banking insider. 10

What was big, though, was the firm's remuneration and bonus pot for 2010, a whopping \$15 billion or an average of \$430,000 each.¹³

Green power corrupts June 05, 2012 - 8:00 PM 1 Comment

Diana Furchtgott-Roth

Power corrupts, even at highest levels of government. Even in the White House. That's the message from the government's energy loan guarantees, as revealed by a little-reported House Government Reform and Oversight subcommittee hearing last month.

Popular in Opinion

At issue was the approval of loan guarantees for BrightSource Energy, a politically connected corporation whose chairman, John Bryson, became Obama's secretary of Commerce last October.

1 Examiner editorial Walker's win should inspire political leaders across the country

John M. Woolard, president and CEO of BrightSource Energy, testified that his company's \$1.6 billion loan guarantee for a solar power plant "was

2 Green power corrupts

awarded completely on the merits of the project."

But Chairman Jim Jordan, R-Ohio, produced an email from Woolard to

3 Dim Bulb: Bill Press

Energy Secretary Steven Chu's senior advisor, Matt Rogers, that hints the White House might have been involved. Dated January 4, 2010, the email states that Peter Darbee, CEO of Pacific Gas & Electric, had himself spoken to President Oberna: "Derbee at PG&E talked directly to Oberna about the program's challenges and the bad situation it puts him in " By "bad situation," Darbee meant that his company needed solar power to comply with California's law to produce 20 percent of its electricity from

renewables by 2017 (later raised to 33 percent by 2020).

4 Bus snobs try to torpedo cheaper bus rapid transit

Woolard also wrote to Rogers: "Please don't distribute this, but I thought you might want to know there is a large group in NYC focused on this transaction and DOE ability to execute. Things are not good and there is a sizeable group of private equity and investment banks writing a letter to Chu about the status of the program and the inability to get loans through -- can you suggest a good time to talk?"

5 U.S. policy should encourage oil and gas exploration

power electricity generating complex in the world.

Coincidentally, the following month, Chu announced conditional loan guarantees of \$1.37 billion for BrightSolar to build three utility-scale solar power plants on federal land in the Mojave Desert, to be the largest solar

But conditional loan guarantees don't equal loans. Over a year later, in March 2011, BrightSource still had no loan. Woolard asked Jonathan Silver, executive director of the Energy Department's loan guarantee

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THE WALL STREET JOURNAL

SMALL BUSINESS | DECEMBER 15, 2009

Venture Capitol: New VC Force

By NEIL KING JR

When tiny Fisker Automotive Inc. hit a financing glitch last year, threatening its plan to build a fancy gasolineelectric hybrid car in Finland, it turned to the U.S. Department of Energy.

The DOE had a bolder idea. Why not also step up the company's plans to develop a less-expensive model, and assemble it in a closed U.S. auto plant?

Within months, Vice President Joe Biden, the former senator from Delaware, was helping lure the embryonic car company to a shuttered General Motors Co. factory four miles from his house in Wilmington, right across the tracks from Biden Park. Soon, Fisker Automotive, a two-year-old business that has yet to sell a car, won loans from the federal government totaling \$528 million.

Fisker had joined a flock of other businesses seeking cash from the biggest venture capitalist of all, the U.S. government.

The DOE hopes to lend or give out more than \$40 billion to businesses working on "clean technology," everything from electric cars and novel batteries to wind turbines and solar panels. In the first nine months of 2009, the DOE doled out \$13 billion in loans and grants to such firms. By contrast, venture-capital firms -- which have long been the chief funders of fledgling tech firms, taking equity stakes in the start-ups that will pay off if they go public -- poured just \$2.68 billion into the sector in that time, according to data tracker Cleantech Group.

Thus, while much attention has been focused on the federal government's involvement in banking, Washington also is gaining sway in another swath of the economy. By financing clean-tech ventures on a large scale, the government has become a kingmaker in one of technology's hottest sectors.

Some young companies are tailoring their business plans to win DOE cash. Private investors, meanwhile, are often pulling back, waiting to see which projects the government blesses. Success in winning federal funds can attract a flood of private capital, companies say, while conversely, bad luck in Washington can sour their chances with private investors. The result is an intertwining of public and private-sector interests in an arena where politics is never far from the surface.

In Delaware, "We had five individuals beating the band -- the three members of the [congressional] delegation, the governor and the vice president," said the state's chief of economic development, Alan Levin. "We had in the vice president a secret weapon, except there is nothing secret about Joe Biden."

A spokeswoman for Mr. Biden said he made no direct appeals to DOE on Fisker's behalf before the loan was approved, though he did talk to the company several times afterward to put in a plug for his home state.

At the DOE, Matthew Rogers, who helps oversee the department's loans, said proposals are vetted by "deal teams" insulated as much as possible from outside pressure. "Lots of people can call the [energy] secretary, but that doesn't mean that any of that necessarily flows down to the deal-team level," he said.

THURSDAY, SEPTEMBER 30, 2010

Goldman Sachs discloses ownership in Talison Lithium Corp.

Talson Lithium Liti's ore stockpiled at one of it's plants in Greenbushes, Australia>>>

Talison Uthium Limited - Press Release TORONTO, Sept. 29 The Goldman Sachs Group, Inc. ("OS & Co."), 200 West Street, ("OS Group").



200 West Street, New York, NY, 10282 New York, NY, 10282 GS&Co. & GS Group are hereinafter referred to collectively as the "Offeror".

2. The designation and number or principal amount of securities and the offeror's security-locking percentage in the class of securities of which the offeror equired ownership or control in the transaction or occurrence giving rise to the obligation to file the news release, and whether it was ownership or control that was acquired in those circumstances.

In connection with a plan of arrangement completed on September 22, 2010 involving Talason Lithium Limited (the "Company") and Salares Lithium Limited ("Salares"), the Company acquired all of the issued and outstanding securities of Salares in exchange for either ordinary shares in the capital of the Company ("Shares") or the equivalent number of exchangeable shares (which may be exchanged for Shares on a one-for-one basis) (the "Amangement"). Further details regarding the Arrangement are set out in the joint press release of the Company and Salares dated September 22, 2010, which has been filed with the applicable regulatory authorities and is available on the Company's SEDAR profile at www.sedar.com.

Prior to the Arrangement, the Company was a private issuer and the Offeror and certain direct or indirect subsidiaries of GS Group beneficially owned and controlled 11,270,431 Shares (the "Offeror Shares"). The Offeror did not acquire any additional Shares in connection with the Arrangement. On September 23, 2010, in connection with the Arrangement, the Shares commerced trading on the Toronto. The Christian Science Monitor - CSMonitor.com

Goldman Sachs culture 'toxic'? Letter confirms suspicions about Wall Street.

Polls show that Americans hold a very low opinion of Wall Street, and a damning public letter of resignation from a Goldman Sachs executive could only amplify that perception.



A Goldman Sachs sign is seen at the New York Stock Exchange. A Goldman Sachs executive director published a withering resignation letter in The New York Times, saying the investment bank is a 'toxic and destructive' place where managing directors referred to their own clients as 'muppets.'

(Brendan McDermid/REUTERS/File)

By Ron Scherer, Staff writer posted March 14, 2012 at 4:47 pm EDT

New York

The opinion article in The New York Times has a simple headline: "Why I am leaving Goldman Sachs," written by Greg Smith, identified as a former executive director.

Mr. Smith, with more than decade at the firm, then goes on to describe the culture at Goldman Sachs "as toxic and destructive as I have ever seen it."

He says he knew it was time to leave when he could no longer look students being recruited by Goldman Sachs in the eye and tell them Energy & Genius

The Saudi Arabia of Lithium

Brendan I. Koerner, 10.30.08, 06:00 PM EST Forbes Magazine dated November 24, 2008

The gas engine made petroleum the world's biggest commodity. The electric car could do the same for the third element on the periodic table.



Mounds of magnesium chloride ring SQM's mine, creating the illusion of snow in the ultra-arid salar.

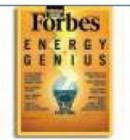


The Lithium Gold Rush Saudi Arabia's Next Act Mr. Ethanol Fights Back Beaker Fuel

A Mighty Wind/Carbon Hangover Shell's Radical Rig

Special Report:

ENERGY+GENIUS



Energy & Genius
The Saudi Arabia of Lithium
The Octopus
Complete Contents

This greasy solution yields the substance that makes modern life possible: lithium. The lightest of all metals, lithium is the key ingredient in the rechargeable batteries that keep cell phones and laptops humming. Chile is the Saudi Arabia of lithium. According to the U.S. Geological Survey, this single ancient lake bed contains 27% of the world's reserve base of the metal.

The electric car could do the same for the third element on the periodic table.

The gas engine made petroleum the world's biggest commodity.

Nothing grows in the heart of the Salar de Atacama. this ancient Chilean lake bed 700 miles north of Santiago may be the driest place on Earth, a wasteland strewed with salt-encrusted rocks that resemble cow pies. Annual rainfall on the salar (which in Spanish means "salt lake") rarely tops a few millimeters. The cloudless skies combine with the high altitude, 1.4 miles above sea level, to produce punishing solar radiation, capable of frying exposed flesh in minutes.

Humans would steer clear of the Salar de Atacama were it not for the precious brine that bubbles 130 feet below its surface. When first pumped from the ground, the brine looks like slushy, dirt-stained snow, of the sort that piles up on Manhattan sidewalks after a spring flurry. But when left to broil beneath the desert sun, the water in the brine slowly evaporates, leaving behind a yellowy mineral bath that could easily be mistaken for olive oil.

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U.S. Identifies Vast Mineral Riches in Afghanistan



Tyler Hicks/The New York Times

A bleak Ghazni Province seems to offer little, but a Pentagon study says it may have among the world's largest deposits of lithium.

By JAMES RISEN

Published: June 13, 2010

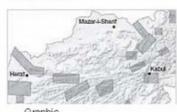
WASHINGTON — The United States has discovered nearly \$1 trillion in untapped mineral deposits in Afghanistan, far beyond any previously known reserves and enough to fundamentally alter the Afghan economy and perhaps the Afghan war itself, according to senior American government officials.

At War

Notes from Afghanistan, Pakistan, Iraq and other areas of conflict in the post-9/11 era.

Go to the Blog »

Multimedia



Minerals in Afghanistan

Readers' Comments

Readers shared their thoughts on this article. The previously unknown deposits — including huge veins of iron, copper, cobalt, gold and critical industrial metals like lithium — are so big and include so many minerals that are essential to modern industry that Afghanistan could eventually be transformed into one of the most important mining centers in the world, the United States officials believe.

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An internal Pentagon memo, for example, states that Afghanistan could become the "Saudi Arabia of lithium," a key raw material in the manufacture of batteries for laptops and BlackBerrys.

The vast scale of Afghanistan's mineral wealth was discovered by a small team of Pentagon officials and American geologists. The Afghan government and Tags:Goldman Sachs, Citi, career management, Wall Street jobs,

By Melanie Rodier * @mrodier

JUNE 24, 2011

S =

As jobs decline on Wall Street, banks like Citi and Goldman are actively recruiting veterans of the Iraq and Afghanistan wars, according to Bloomberg News.

Citi and Goldman, together with Credit Suisse, Bank of America and Deutsche Bank were recruiting at a job fair hosted yesterday by the U.S. Chamber of Commerce for service personnel aboard the USS Intrepid, a museum in the Hudson River, Bloomberg said.

Last year, WS&T reported that Wall Street firms and hedge funds were actively recruiting former CIA and military intelligence officers in a bid to boost their security and risk management practices by looking for expertise outside the corporate world.

Former Afghan and Iraq war vets with intelligence operations experience are particularly in demand since they can bring new technology and techniques to research and analysis, Michael Bagley, founder and president of Washington D.C.-based financial intelligence firm, The OSINT Group, told WS&T.

From Bloomberg:

Former Marine Corps captain Christopher Perkins, now head of Citigroup's derivatives operation in the Americas, said he dealt with budgets and negotiation while stationed in Japan, his first education in business practices. Citigroup hired him based on skills obtained in the military, not to burnish the firm's image, he said.

"It's not about charity work," Perkins said. "It's about making the firm better."

Still, despite their skills the road to civilian work in the financial industry could be a very tough one for the veterans:

Financial sector layoffs are up 21 percent this year. Banks, insurance firms and brokers said they planned to eliminate 11,413 positions through May, according to Challenger, compared with 9,431 during the same period in 2010.

The Washington Post

Back to previous page



E-mails about clean-energy loans provide new details on White House involvement

By Carol D. Leonnig and Joe Stephens, Published: August 8 | Updated: Thursday, August 9, 7:23 AM

President Obama's staff arranged for him to be personally briefed last summer on a loan program to help clean-energy companies, two months before the program was thrust into headlines by the collapse of its flagship, the solar company Solvndra, records show.

About the same time, then-White House Chief of Staff <u>William Daley</u> resolved a dispute among administration officials over another project in the program, clearing the way for a \$1.4 billion loan, according to documents and sources familiar with the situation.

The documents, a series of e-mails among Energy Department staff members involved in managing the program, provide new details about the level of White House involvement in the controversial initiative. White House officials have said in the past that final decisions about which companies would receive the loan guarantees were made by career staff members at the Energy Department, not political appointees.

Administration officials said Wednesday that the e-mails show that the White House involvement was appropriate and that there was no pressure on agency officials.

That loan program, a signature piece of the Obama administration's effort to stimulate the economy, has become a major issue in this year's <u>presidential campaign</u>. Republicans have charged that the program wasted critical stimulus money meant to create jobs, spending it instead on ill-advised projects that

Lithium and Obama's Electrification of America

Commodities / Metals & Mining Aug 13, 2009 - 02:50 PM By: Richard Mills



Commodities



America's future energy course is being charted today because of the ramifications of peak oil, because cars pollute too much, because of global warming, because America wishes to end her dependence on foreign supplied energy and to be blunt... Americans need jobs.



Hannamon/AlsdomDaily com

"A new energy economy is going to be part of what creates the millions of new jobs that we need," President Obama.

Because of these reasons a whole new industry, a domestic automotive and industrial lithium-ion battery industry, is going to be built.

President Obama recently said, when announcing US\$2.4 billion in grants to accelerate the manufacturing and use of next-generation car batteries and electric vehicles, "I'm committed to a strategy that ensures America leads in the design and the deployment of the next generation of clean-energy vehicles. This is not just an investment to produce vehicles today; this is an investment in our capacity to develop new technologies tomorrow."

Obama's plan is to have one million electric cars on U.S. roads by 2015. JPMorgan predicts hybrid sales will reach 9.6 million cars three years later. Global Strategic Analysts predicts that the market for lithium-ion batteries is likely to grow at a compound annual growth rate of over 32% through 2010. With an increased demand for hybrid automobiles this growth rate will continue.

Commodity rules rule! Will electrification ignite a lithium boom?

Only time will tell. But with lithium batteries going to play a key role in the auto industry and eventually appearing throughout the electrical grid it's entirely plausible, in this author's humble opinion, that lithium is the next break out investment.

There's billions and billions of dollars, courtesy of the government's stimulus package, still to come (Washington has already handed out US\$8 billion in loans) for advanced battery technology R&D companies and battery manufacturers. The auto industry is gearing up to make its first real go at marketing plug-in vehicles for the masses. The start flag has dropped and the race to build lithium-ion batteries for vehicles has started.

If the US does not develop a lithium-ion battery manufacturing sector at home it may very well be shut out of the electric car business – he who makes the batteries will also make the cars. Lithium demand will skyrocket as more and more hybrids roll down the assembly line. Current processing potential is limited, making it vulnerable to market disruption. And limited supplies could mean big profits for lithium miners and producers.

It's extremely hard to believe that any politician or lobbyist would consider sourcing the needed supplies for Obama's Energy Revolution from offshore suppliers and risk the same foreign dependence as they have today with oil. Politicians will fight tooth and nail to avoid importing lithium or lithium-ion batteries.

Because there is so much money being thrown around and because lithium is the key ingredient to make these future electric cars viable it shouldn't come as a surprise to anyone if investors are smiling with glee over the prospects of a huge boom in the prices of their favorite lithium explorers and producers.

Will the Electrification of America become unplugged?

The U.S. Government Accountability Office, in a report to congress, warned that by switching from gaspowered cars to lithium battery powered cars the U.S. might simply "substitute reliance on one foreign resource for another."

"Politicians ... ran on a plank based on ending foreign oil dependence, and it is unlikely that voters will want to meekly transfer this dependence to lithium." Said the Council On Hemispheric Affairs, Washington, D.C.

Obama said this during his election campaign....*Finding the new driver of our economy is going to be critical. There's no better driver that pervades all aspects of our economy than a new energy economy...That's going to be my No. 1 priority when I get into office." President Obama With billions of dollars in government funds coming down the pipeline for advanced batteries courtesy of the stimulus package, and the auto industry gearing up to make its first real go at marketing plug-in vehicles for the masses, the race to build lithium-ion batteries for vehicles has never been hotter.

Nassive international battery makers may dominate the mobile device and laptop markets for lithium-ion batteries, but a growing number of companies — some founded just in the last year, others that have been around for over a decade — are highing to conve out a piece of the battery vehicle market. They have their work cut out for them, however, as more established companies such as Sanyo, Hitachi and NEC are eying the same prize.

As the money rolls out and competition heats up, here are 13 battery startups you should know about:

A123Systems: Massachusetts-based A123Systems, working with nanoscale materials licensed from MTT, has attracted big-name backers including General Electric, Motorola and Qualcomm. The startup had raised \$1.32 million by late 2007, and last year filed for an IPO. But A123 has since revised its registration with the SEC several times (taking into account tumult on Wall Street and in the auto industry, and most recently the introduction of new government incentives) and has yet to go public.

Runner-up to supply cells for General Motors' Chevy Volt and winner of a deal with Chrysler to make modules and battery packs for the struggling automaker's planned plug-in vehicles, A123 is also working on energy storage systems for electric utilities and got its start with batteries for power tools. The company has its eye on at least two DOE programs, and has won state-level support as part of Michigan's efforts to lure battery manufacturing jobs.

ActaCell: Having raised \$5.8 million in a Series A round led by DFJ Nercury and joined by Google.org last summer, ActaCell has been working toward a 2010 commercial launch. ActaCell's devices, which it expects to have a longer cycle life at lower costs than the competition, are based on technology developed at the University of Texas at Austin. The company has joined the National Alliance for Advanced Transportation Battery Cell Manufacture, a group of 50 U.S. companies that plan to invest more than \$600 million in a battery R&D center in Kentucky, if DOE funds come through.

Boston-Power: Massachusetts-based laptop battery maker Boston-Power unveiled a new battery for plug-in vehicles in May 2009. The 4-year-old company hasn't released many details about this "Swing" model, other than to say that it will deliver "industry-leading capabilities" in areas such as energy density, lifespan, safety, cost savings and environmental sustainability.

While Boston-Power says it has enough manufacturing capacity to produce millions of cells per month in Asia, it aims to build a new lithium-ion battery factory within three years in Auburn, Mass., for both laptop and vehicle battery cells — If it wins approval from the DOE for about \$100 million in grants. Otherwise Boston-Power plans to continue to grow and open more factories to meet demand, but probably not stateside.

CFX Battery: Co-founded less than a year ago by Rachid Yazami, research director of France's National Center for Scientific Research, Caltech professor Robert H. Grubbs and French chemist Andrew Hamwi,

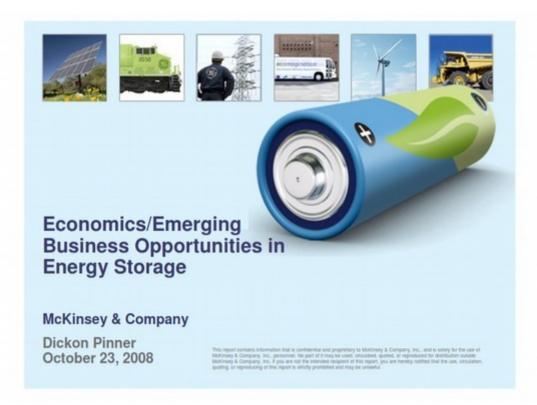


Illustration 1: PITCH DOCUMENT FOR CONGRESS PRODUCED FOR LITHIUM VC'S

"Let's Go Get Some Lithium!"



Wealth Daily

Investing in Lithium Mining Stocks

How To Profit from the Lithium Boom

By Brian Hicks

Friday, October 16th, 2009

Editor's Note:

While Western Lithium remains a buy, the Pure Asset Trader team tells me they have 2 rare earth trades — and possibly a third — they're looking to issue over the next two weeks... with an opportunity to double if not triple your money in mere months.

lan Cooper heads up this team. And when they talk energy, our readers are all ears. That's because they've closed 33 winners in 35 tries this year. The gains have been exceptional.

For more information on the Pure Asset Trader's next move, click here

For now, here's the lithium piece I wrote a few months ago. This market is just heating up. And as you'll see below, it's a call that's already made readers a quick 30% gain.

Warren Buffett stunned the market back in September 2008 when he announced that he was investing \$250 million in a Chinese electric car company.

I say stunned because Warren Buffett seemed to violate one of his own rules of investing: Invest in companies you understand.

He admitted that he doesn't know a thing about electric cars.

So why did he invest?

Because maybe, just maybe, he knows that electric cars are a guaranteed winner.

I'm not recommending GM, Nissan, or any other automobile stock that's developing electric cars.

Instead, I'm going to recommend the commodity that is vital to the battery technology that'll be used in electric cars: lithium.

My play is a tiny mining outfit called Western Lithium (WLC.V: WLCDF). The stock currently trades for about \$1.08 a share.



If you're skeptical or concerned that fuel efficiency alone is not enough to entice Americans to buy electric cars, consider the Silicon Valley company Tesla Motors (pictured above). While their roadster is the first production automobile to use ithium-ion battery cells and travel more than 200 miles per charge, it is also capable of going from 0-60mph in under four seconds.

Not only will the Roadster leave most sports cars in the dust, the car recently set a distance record in April 2009 when it completed the 241-mile Rallye Monte Carlo d'Energies Alternatives with 36 miles left on the charge.

Even though the Roadster is probably too pricey for the average consumer at just over \$100,000. Tesla has taken more than 1,000 reservations for the car and expects to begin production of an all-electric and more affordable sedan starting in late 2011.

But just remember, the Tesla - as well as every other electric car - needs lithium. And demand for

Lithium prices have nearly tripled over the past decade with 22% compound annual growth since 2000 for use in laptops, cell phones, and other electronics

Demand is expected to continue rising, the recent lithium mania has been ignited by the fact that <u>electric cars</u> require about 3,000 times the lithium needed for an average cell phone, or 100 times the lithium used in a computer battery.

This huge spike in demand should propel lithium prices much higher over the next few years.

The best way to profit from the lithium boom is <u>Western Lithium</u>, which owns the largest known lithium deposit in North America. Take a look. . .

Ownership Questions Dog ENER1 (HEV) As It Competes For Loans And Grants

Posted by <u>Alison Kroulek</u> | # | 08:40:27 am on March 23, 2009

Ener1 seems like it would be one of the companies most likely to benefit from the stimulus plan. After all, the company makes batteries for electric cars and it has a manufacturing plant in Indiana, so it benefits American workers. Plus, the market for these batteries should take off as America tries to reduce the amount of fossil fuels used to power our vehicles. Here's how Barron's describes Ener1's growth potential:

If Ener1 were to win 5% to 12% of a million-vehicle battery market, the company estimates, it could pull in \$2.1 billion in annual revenue with 15% margins (based on earnings before interest, taxes, depreciation and amortization). "If you want to apply a 15 times multiple to that cash flow, which in any normal market is a reasonable growth market, you're talking about a \$4.5 billion equity-market cap," says CEO Charles Gassenheimer.

To help expand its facilities here, Ener1 has applied for a \$480 million loan from the US Department of Energy and plans to apply for some of a \$2 billion dollar grant that is part of the Advanced Battery Manufacturing Initiative in the stimulus plan.

However, questions about the company's ownership are complicating the application process. Here's how the Barron's article I linked to above explains the problem:

As of late February, some 62% of Ener1's outstanding shares were owned by privately held Ener1 Group. In turn, 66% of Ener1 Group — a recent participant in a \$5.7 million loan to Think Global, which is trying to emerge from bankruptcy — is held by Bzinfin, a British Virgin Islands company whose "indirect beneficial owner" is Boris Zingarevich, a Russian businessman. Zingarevich has close ties to Russian President Dmitry Medvedev and Prime Minister Vladimir Putin.

This is a concern for the Department of Energy. There are fears that if Ener1 develops a successful battery, all of the research and development funded with DOE loans and grants could be transferred back to Russia, especially since there are also military applications for the technology.

Speaking to Barron's, Ener1 CEO responded to these concerns by denying that the Russian investors have any influence on the decisions the company makes. Here's how he explains the situation:

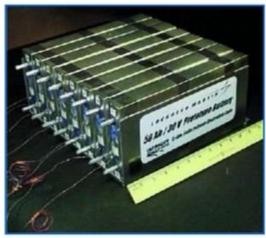
Gassenheimer says that Zingarevich joined the company "when the two founders ran into financial difficulties... If it were not for Boris, this company would not be alive today. He's been a tremendous partner, a patient investor. It's nice to have someone with this level of patience that is fully committed to the story." He adds that Zingarevich "as a matter of SEC rules...is deemed to 'beneficially own' a majority of our shares" but has

Contact

Filed in archive Companies, Startups, Strategy by Drea on June 15, 2009 | No Comments

Ener1 Wants to Win Lithium Ion Battery Race

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RUSSIAN OWNED

Image: CarSpace

Lithium ion battery manufacturer Ener1 (HEV) could become the country's first lithium ion battery mass producer—if it wins a \$480M Department of Energy loan. CNNMoney has more:

Enerl's newly opened production facility near Indianapolis could employ 3,000 workers. Like other renewable energy companies popping up in the Midwest, people are hoping Enerl can replace some of the fast-disappearing auto and other manufacturing jobs.

Its lithium-ion battery technology is praised for being one of the best available. But Ener1 must compete for big contracts against larger, mostly Asian firms with much more experience in this field. The company has applied

for a \$480 million government loan to expand its facility and hopefully allow it to land a big contract. If that happens, Ener1 says it will go on a hiring spree.

Many of its competitors, including Japan's Panasonic and NEC, South Korea's LG, and a joint venture between U.S.-based Johnson Controls (JCI, Fortune 500) and the French company Saft, have been making batteries in high volumes for decades. (Ed: The WSJ reports that these are mainly for small devices like laptops and mobile devices. The lithium ion specialty remains a new one.)

If Ford or General Motors are going to buy batteries for an electric car, they need confidence the company they're buying from can deliver. The lack of experience may be one reason why GM decided to go with LG when choosing a battery supplier for its much-hyped Volt.

As the automobile industry prepares to shift from gas to electric power, grant-hungry battery manufacturers are lining up to gather \$2.4 billion worth of loans and grants from the Department of Energy. The WSJ has more:

At the (application) deadline last week, the department said it had received 165 (grant and loan) applications. Companies vying for the federal money include General Motors Corp., Dow Chemical Co., Johnson Controls Inc. and A123 Systems, a closely held battery maker backed by General Electric Co. and others. States including Michigan, Kentucky and Massachusetts are also weighing in with applications, usually in alliance with their favored battery makers.

When the winners are decided, as soon as the end of July, the Energy Department may anoint Livonia, Mich., or Indianapolis or Glendale, Ky., as the future U.S. hub of car batteries. A 2008 study by researchers at Alliance Bernstein forecast the current 89 billion-a-year auto-battery market, based on lead-acid batteries, could reach more than \$150 billion by 2030.

The Obama administration is trying to position the United States to become the world's foremost manufacturer of lithium ion batteries. If the plan works, Ener1's domestic first-mover advantages could poise it to control the global LI battery industry. "Ener1 estimates it could win 5-12% of a million-vehicle battery market, creating \$2.1B in annual revenue with 15% margins," according to Seeking Alpha. As it stands, nobody knows yet whether the DOE will give it the necessary grant.

There's an interesting twist to this potentially All-American story. Seeking Alpha reports that...

...66% of Ener1 Group is held by a company whose 'indirect beneficial owner' is Boris Zingarevich, a Russian businessman with close ties to Russian President Dmitry Medvedev and Prime Minister Vladimir Putin. Foreign control theoretically shouldn't matter to the Department of Energy, but it is looking to foster an American advanced-battery industry, not a Russian-controlled one. This is especially true since advanced batteries are likely to have military uses in addition to civilian ones.

For now, Ener1 remains optimistic. And the lithium ion battery story is just beginning.



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POLICY: NATIONAL SECURITY

John Boehner and seven GOP lawmakers back from secret Afghanistan trip

BY SUSAN FERRECHIO | APRIL 14, 2014 | 12:00 AM

TOPICS: CONGRESS THE PENTAGON JOHN BOEHNER AFGHANISTAN NATIONAL SECURITY

PENNAVE





to Kabul, Afghanistan, this

House Speaker John Boehner, R-Ohio, traveled to Kabul, Afghanistan, this past weekend with seven other House Republican lawmakers to get a first-hand look at the political situation in the country after the recent democratic elections, Boehner's office announced Monday.

The trip was not announced until now to maintain security, according to a spokesman.

The message from lawmakers was "that the House of Representatives wants to maintain a rightsized presence in Afghanistan" following the years-long war and American involvement in the country to steer it toward democracy.

Lawmakers met with U.S. military troops, Ambassador James B. Cunningham and General Joseph F. Dunford Jr., commander of the International Security Assistance Force and U.S. Forces





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POLICY: NATIONAL SECURITY



BY SUSAN FERRECHIO | APRIL 14, 2014 | 12:00 AM

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